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Monetary Control: In Search of an Operational Terminology

Adrian A.R.J.M. van Rixtel

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Monetary Control: In Search of an Operational
Terminology

Adrian A.R.J.M. van Rixtel*
May 1991

* The author is a Ph.D. Candidate in the Tinbergen Institute, Free University of Amsterdam. He was guest of the International Department and the Institute for Monetary and Economic Studies of the Bank of Japan during July-August 1990. He wants to express his deepest gratitude for the hospitality and the intellectually stimulating environment provided by the Bank of Japan. Comments and suggestions by Frank den Butter, W. Poole and Hans Visser are gratefully acknowledged.

Disclaimer

The views expressed in this paper are those of the author and should not be attributed to the Bank of Japan or any other public or private institution in the Netherlands or Japan.

1.0 Introduction

"The uncertainty of economic arguments renders language important. The vision that its concepts convey can be a decisive reason for acceptance of an argument. Choosing the right words, therefore, is crucial in economic discourses."

Arjo Klammer (1985)

In economic science concepts have sometimes a different kind of meaning when used by different groups of like-minded economists. For example, a monetarist interpretation of monetary control differs significantly from a non-monetarist perception. Inconsistencies regarding formulation and definition of basic concepts in economic science complicate discussion and result in unnecessary talking at cross-purposes¹. Therefore, to avoid any misunderstanding section 2 will be devoted to the discussion and definition of the concept of monetary control.

In section 3 some implications of the analysis of monetary control for Japan will be presented.

It has to be mentioned that many ideas presented in this paper originate from research regarding the Japanese financial system and monetary policy. The concepts and ideas presented in this paper make up the foundation of the author's research with respect to monetary policy in Japan. Before starting model and empirical analyses, one should be perfectly clear about the terminologies and concepts to use. This seems to be especially important with respect to research about Japan, a country sometimes difficult to understand for non-Japanese. The author has the impression that the following interpretations and definitions of monetary control fit into a theoretical framework regarding monetary control in Japan.

2.0 Monetary control

The concept of monetary control is one of the most used and discussed terminologies in monetary theory. Over the past 25 years, monetary control has attracted attention of many economists from various schools of thought. To quote Lombra (1980): "The literature on monetary control was one of the few things that grew faster than the money stock during the 1970s."²

However, this rapid growth of literature has been accompanied by a corresponding growth in different perceptions and interpretations of monetary control, resulting in confusion and inconsistencies in the underlying terminology and theoretical framework³. Therefore, in this section the general concept of monetary control will be discussed.

According to the Oxford Guide to the English Language⁴, control can have one of the following meanings: power to give orders or restrain something; means of restraining or regulating; check.

In economics especially the first 2 interpretations of control seem to be important. The power aspect of control can be interpreted as the extent to which a certain body can influence or direct the development of a certain process or influence a certain variable at a specific point of time in a specific desired direction. This interpretation is strongly intertwined with the degree of effectiveness of the control exercised. The second meaning is related to the perception of control as a specific instrument of a certain body to implement its policies.

Both aspects of control in economics have been implicitly recognized by Tinbergen. In his "On the Theory of Economic Policy", Tinbergen discusses the power and instrument perceptions of control within the framework of economic policy. Instruments are "... variables under the command of the government"⁵, and "... may be overall-controls or detailed controls"⁶. The power-process interpretation of control can be found in Tinbergen's theoretical framework regarding questions of economic policy. His distinction between targets and instruments⁷ assumes a certain degree of power of the government policymakers with respect to the use of the policy instruments and the realization of

the policy goals. Otherwise this distinction would be quite meaningless for the actual implementation of economic policy. The power of the authoritative body "to get things done" is reflected in the question of the effectiveness of its various instruments, according to Tinbergen "The central question of economic policy"⁸.

The conceptual framework of Tinbergen regarding issues of economic policy has been widely followed by others and consequently his implicit interpretations of control as an instrument (a control) or the degree of (successful) power over the process of implementing economic policy. Both interpretations can also be found in the literature on monetary control.

Before starting the analysis of the instrument versus the power-process interpretations of monetary control, it has to be mentioned that in the following analysis of monetary control a relatively strict definition of monetary policy will be used. Table 2.1 gives a concise survey of two possible interpretations of monetary policy.

Table 2.1 Broad versus strict definition of monetary policy⁹

Monetary policy in broad sense:

- Structural policy
-) Supervisory policy
- Prudential policy
- Monetary policy in strict sense

Monetary policy broadly defined can be simply interpreted as the whole complex of policies implemented by the monetary authorities. As main elements of monetary policy in broad sense can be mentioned structural policy, prudential policy and strictly defined monetary policy. The so called structural policy concerns the structure of the financial system, i.e. the whole structure of financial institutions and financial markets¹⁰. Examples of structural policy are decisions regarding the kind of business various financial institutions are allowed to

perform (for example, banking versus securities business), regulations with respect to the location of new branches and listing procedures at stock exchanges. Prudential policy deals according to Wessels (1987) with "... the way financial institutions operate as firms and is ultimately aimed at maintaining the continuity of the banking system"¹¹. Important instruments of prudential policy are capital adequacy ratios and liquidity or reserve requirements¹².

The main goal of both structural and prudential policies is ensuring the stability of the financial system. For that purpose the monetary authorities¹³ exert supervision by means of explicit regulations and informal instructions. Therefore structural and prudential policy together can be called supervisory policy.

Monetary policy in strict sense is aimed at the realisation of the macro-economic policy goals. To achieve these goals the monetary authorities can use well-known policy instruments, e.g. open market operations and foreign exchange market interventions.

In this study the interpretation of monetary policy will be limited to the restricted definition, i.e. no attention will be paid to supervisory policy, on the understanding that macro-economic implications of reserve requirements will explicitly be included in the analysis. The restricted definition will also be applied to the perception of monetary control.

After this necessary discussion of the interpretation of monetary policy we will return to the analysis of the instrument versus the power-process interpretations of monetary control.

The meaning of monetary control in the sense of explicitly mentioned control instruments of the monetary authorities has been recognised by Horvitz (1979) with respect to the framework of Federal Reserve control in the United States. Horvitz distinguishes the monetary policy instruments between general controls, selective controls and other powers of the Federal Reserve. General controls affect credit markets in general, while selective controls are aimed at specific uses of funds¹⁴. The other powers of the Federal Reserve consist of statutory instruments such as control over the maximum interest rates

on bank deposits and informal powers (so called moral suasion).

In a somewhat different terminology, the interpretation of monetary control in the sense of controls as instruments is presented in table 2.2.

Table 2.2 Instrument interpretation of monetary control¹⁵

- Market based monetary controls:
 - * direct controls: - formal
 - informal
 - * indirect controls: - formal
 - informal
- Non-market based monetary controls:
 - * direct controls: - formal
 - informal
 - * indirect controls: - formal
 - informal

In this analysis controls are classified according to their character (market versus non-market, direct versus indirect and formal versus informal). The main reasons for this choice are threefold. First, this classification enables a more universal application. In the analysis of control of specific financial systems, a classification based on the specific economic and financial variables the monetary authorities intend to control (the so called target variables) is often used¹⁶. As examples of specifically target oriented control classifications interest rate controls and controls of international capital movements can be mentioned. Another example of an analysis of a target oriented control classification has been presented in Pierce (1982). Pierce discusses "... the major regulatory factors in the United States that affect control of the quantity of money"¹⁷. However, the attention on a specific target presupposes a specific interpretation or functioning of the controls concerned. With different targets, the same controls

can have totally different characteristics, for example with respect to the mechanism through which they influence these targets. Furthermore, since the structure of every financial system depends heavily on specific economical, financial, political, social and cultural characteristics of the country concerned, the specific target variables of various monetary controls will be consequently determined by these properties. As a result, a balanced interpretation and comparison of monetary controls in specific and between different countries will be hampered. Second, from the perspective of a control based analysis it seems more logical to depart from the specific nature of various monetary controls instead of their targets. For example interest rate controls can vary from market to non-market based and from formal to informal. The characteristics of the controls exercised are for this study of monetary control essential, not their ultimate targets. Third and most important, the presented classification allows for the explicit introduction of a whole range of various controls in monetary analysis. Also controls which initially don't seem to be very important from the perspective of monetary control can be included in the analysis. The classification enables us to take into account specific characteristics of implemented monetary controls for various countries. For example, one point of attention is based on whether or not and to what extent the various controls are exercised or implemented through the market. In other words in this case the degree to which the government exercises control or the market is essential. This distinction is especially important for countries like Japan, with traditional strong governmental influence on economic and other processes embedded in society. Furthermore, this distinction is also important to analyse processes such as financial liberalisation and financial deregulation, processes which stress the functioning of the market mechanism. The emphasis on formal versus informal aspects can also be explained by the Japanese context of this study, a context in which informal regulations seem to be (very?) important. For example, according to one observer "... as a result of deregulation, formal controls are being replaced by informal ones, which are more effective"¹⁸.

In table 2.2 three levels of classification can be distinguished.

On the first level market versus non-market based monetary controls are recognised. One of the basic criterions of this discourse regarding the instrument interpretation of monetary control is whether the monetary authorities implement monetary controls through economic markets or not. Application of market based monetary controls influences the supply and demand conditions in one or more markets and consequently the level or direction of one or more target variables. In the case of non-market based controls the influence of market forces is totally eliminated.

Secondly, direct monetary controls can be distinguished from indirect monetary controls. Direct monetary controls can be interpreted as formal or informal instructions and regulations of the monetary authorities through which they directly control the level or direction of the target variables. Direct monetary controls have the advantage of direct control by the monetary authorities over certain or groups of certain target variables. Vice versa, indirect monetary controls do not have a direct impact on the target variables, but influence these variables through other economic and financial variables.

Finally, the already mentioned formal and informal monetary controls make up the third level of classification. In the case of formal (regulatory) controls the monetary authorities use explicit formal regulations such as laws. Well known examples are laws regarding the upper limits of bank deposit rates, e.g. the former Regulation Q in the United States and the Temporary Interest Rate Adjustment Law in Japan, and the movement of international capital flows, for example the Foreign Exchange and Foreign Trade Control Law in Japan before 1980. Informal regulatory controls are not based on explicit formal regulations but consist of informal instructions, as group often called moral suasion. The informal nature of this kind of instructions makes it often difficult to judge if and to which extent they are exercised or influence the economy and the target variables. Informal monetary regulatory controls are sometimes applied to the total amount of individual bank lending. It should be noticed that sometimes formal controls can have intended or unintended informal side-effects. This point has been made implicitly by Poole (1990) regarding the discount

window. The discount window can be regarded as a formal monetary control, since it has been laid down in some kind of central bank act. However, in a special situation the discount window has also an informal character. Namely, when interbank interest rates (for example the federal-funds rate in the United State) are above the official discount rate, and consequently the central bank is subsidizing the banking sector, "... the subsidy discount window enables the Federal Reserve to establish regulatory constraints that might not otherwise exist"¹⁹.

It has to be mentioned that this analysis depends on which variable the monetary authorities choose as specific target. For different target variables the characteristics of individual controls change. For example, within the perspective of this analysis the amount of direct lending from the central bank (borrowed reserves) is a direct control regarding the monetary base (one possible target variable), but an indirect control regarding the money stock (another possible target variable).

Table 2.2 shows that the monetary authorities have at their disposal 8 different kinds of monetary controls (of course they can use various instruments within one group of these controls). It would be very interesting to see whether these 8 different groups of monetary controls could be put together in some kind of analytical framework (some kind of model). It is the author's intention to try so for Japan.

To avoid any misunderstanding it is repeated that this study distinguishes between monetary controls and (monetary) instruments. From an analytical point of view 8 different groups of monetary controls have been recognised. Within every group a not necessarily equal number of instruments can be used by the monetary authorities.

As an example of the above mentioned instrument interpretation of monetary control, an analysis will be presented with the money stock as target variable.

The best known example of a market based control which directly

influences the money stock is the instrument of open market operations. The possibility of implementing open market operations is mostly explicitly stated in a certain law (formal control). When not, an informal control is effective.

Non-sterilised foreign exchange market interventions can be mentioned as an example of a formal market based monetary control of indirect nature regarding its influence on the money stock. An informal example of an indirect market based monetary control is a governmental "request" to the real estate sector to refrain from speculative actions. This control is market based, because it influences the supply and demand conditions in the real estate sector. Furthermore, the request has an indirect impact on the money supply through its effect on total wealth and consequently on the total amount of collateral for bank credit.

A non-market based monetary control which directly influences the domestic money supply is for example a law which regulates international capital flows in and out of the country (formal control). An informal control with respect to this situation is a guideline regarding the amount of credit individual banks are allowed to provide (guideline regarding indirect borrowing), under the assumption of no direct borrowing as replacement for lost potential bank credit.

Examples of indirect non-market based formal and informal monetary controls are respectively legal reserve requirements and the above mentioned informal character of the discount window in case of a situation when interbank interest rates are above the official discount rate. A summary is presented in table 2.3.

Table 2.3 Summary monetary controls with money stock as target

(market, direct, formal) = open market operations, law based
 (market, direct, informal) = open market operations, not law based
 (market, indirect, formal) = non-sterilised foreign exchange market interventions
 (market, indirect, informal) = guideline speculations real estate sector

(non-market, direct, formal) - law international capital movements
 (non-market, direct, informal) - guideline amount of bank credit
 (non-market, indirect, formal) - legal reserve requirements
 (non-market, indirect, informal) - informal aspect discount window

After the analysis of an interpretation of the instrument oriented approach of monetary control, attention will now be focused on the power-process perception of monetary control. This interpretation is mostly used in research concerning monetary control issues. However, it is extremely difficult to find a clear definition of monetary control from a power-process perspective.

The power-process interpretation of monetary control concerns two major concepts, i.e. power and process. The power and process elements of monetary control are related to a couple of obvious questions. First, the questions of which institutions and/or agents exert monetary control and to what extent (whether or not successfully) are clearly relevant. Second, of course the goal of their exercised (monetary) control is important. In this respect monetary control could for example be interpreted as control over the money stock, interest rate(s), exchange rate or combinations of these variables (under certain circumstances). However, monetary control from a power-process perspective is, as will become clear, nearly always interpreted as control over the money stock. Furthermore, it is well known (and as will follow also from the subsequent analysis) that the process of implementing monetary policy can be divided in certain sections, and consequently the degree of control over the implementation of monetary policy. Different groups of economic, political and/or other agents and/or institutions have the ability to exert power to a certain degree over some or all of these sections.

In the following presentation these aspects of monetary control in a context of a "power and process" framework will be discussed. However, before starting this analysis, a brief summary of some monetary terminologies will be presented. The main reason for this explicit analysis of terminologies and interpretations is again to avoid

misunderstanding and misinterpretations, and to put monetary control in the broader context of other monetary terminologies. The summary just serves as an example of the confusing and sometimes even inconsistent use of words and concepts in monetary policy and control theory. Given the huge amount of literature regarding monetary policy and monetary control this small survey is certainly biased and not complete.

Table 2.4 Monetary Terminologies

Monetary policy [Burger (1971)]
 Monetary policy control [B.Friedman (1975)]
 Monetary policy process [Burger (1971), B.Friedman (1975), B.Friedman (1977)]
 Monetary control procedures [Black (1982)]
 Monetary policy operating procedures [Walsh (1990)]
 Monetary policy strategy [Poole (1990a), Friedman (1977), Brunner (1980)]
 Monetary mechanism [Modigliani and Papademos (1980)]
 Monetary management [Lamfalussy (1990)]
 Money/money stock control [Poole (1976) and (1982), Bryant (1982)]
 Monetary control [Poole and Lieberman (1972), Friedman (1977), Poole (1977), Brunner (1980), Lombra (1980), Black (1982), Pierce (1982)]
 Monetary controls

Monetary policy is widely discussed and defined in a great number of textbooks and articles. A clear definition of monetary policy has been presented by Burger (1971). According to Burger, monetary policy consists of the deliberate manipulation of the monetary policy instruments by the monetary policymakers. Another interpretation has been presented in this paper, i.e. the interpretation of monetary policy in restricted sense.

B.Friedman (1975) applies the terminology of monetary policy control (problem). In this analysis Friedman "... uses a static deterministic

model to define the basic elements of the targets-and-instruments structure of the monetary policy control problem". He discusses the so called levels of the monetary policy control problem. According to Friedman, the monetary policy control problem can be divided in a broad macroeconomic level and a money market level. As an example of the macroeconomic level of the monetary policy control problem Friedman quotes Poole: "..., Poole (1970) has posed the alternative of monetary policy control of nominal income by means of direct control over either the interest rate or the money stock"²⁰.

The money market level is represented by "the alternative of control of the money stock by means of direct control over either the interest rate or the stock of nonborrowed reserves". In brief, Friedman seems to use the terminology of the monetary policy control problem to indicate both instrument and intermediate target problems²¹.

The term monetary policy process has been described in Burger (1971). In his view the monetary policy process consists of two phases. In the first phase "... the policymakers must decide which economic variables they ultimately desire to influence"²². The second stage consists of the implementation of monetary policy. B.Friedman (1975) also uses monetary policy process but he does not explicitly define it²³. B.Friedman (1977) gives a clearer picture. In his "The Inefficiency of Short-Run Monetary Targets for Monetary Policy" Friedman describes the strategy and tactics levels of the two-stage monetary policy process. At the strategy level the monetary authorities have to choose the intermediate targets with respect to the ultimate goals (for example, choose between the money stock and interest rate as means of influencing income). At the tactics level a choice has to be made about the instrument the monetary authorities intend to use for controlling the intermediate target (for example choice between monetary base and interest rate as instrument for controlling the money stock).

It will be clear that, although Burger as well as Friedman use a two-layered perception of the monetary policy process, they have a different interpretation. The explicit mentioned choice of the ultimate objectives or goal variables in Burger (1971) (this choice is even one of the two phases mentioned) fails in the interpretation of Friedman. Of course, it would be possible to include the choice about the policy

goals in the analysis of Friedman, but in that case (in comparison with the Burger perception) Friedman's two-layered perception would change in a three-layered one.

Black uses the terminology of monetary control procedures in his evaluation of the effects of the introduction of the reserves procedure, according to Black "... the new Federal Reserve procedures for tighter control over monetary growth"²⁴, by the Federal Reserve in October 1979 in an open economy. In Poole (1982) the same procedure is analysed in terms of Federal Reserve operating procedures.

A similar but more general defined concept is given by Walsh (1990). Walsh uses the terminology of monetary policy operating procedures, i.e. the set of rules, traditions, and practices that govern the implementation of monetary policy, to describe the Federal Reserve operating procedures during the last fifteen years.

Poole (1991a) does the same for the last 25 years, although in terms of another terminology, i.e. the strategy of the Federal Reserve. With respect to controlling the money stock Poole distinguishes two possible control strategies: the monetary base and interest rate strategies of controlling the money stock. In this analysis the use of the concept strategy is related to the choice of the instrument by the monetary authorities to control the intermediate target, in this case the money stock. However, this interpretation of strategy in monetary theory is in contrast with the interpretation of the first stage or strategy level in B.Friedman (1977) mentioned above. Friedman's terminology of the tactics level or the second stage choice between (non-borrowed) reserves and short-term interest rates as instrument for controlling the money stock is comparable with the use of the term strategy in Poole (1991a). To make things even more complicated, Brunner (1980) discusses the strategy problem regarding monetary theory. Brunner distinguishes between nonactivist and activist strategies of monetary policy, also known in terms of the rules versus discretion debate²⁵. As is well-known, a nonactivist monetary policy strategy is characterised by a constant monetary growth path.

Modigliani and Papademos (1980) discuss the monetary mechanism, that is the mechanism through which the monetary authority by controlling certain financial variables achieves (more or less) effective control

over nominal income.

Monetary management is according to Lamfalussy (1990) the establishment of intermediate targets and the conduct of short-run monetary policy.

Money control or money stock control are of course widely used and stated terminologies. As examples Poole (1976) and (1982) and Bryant (1982) can be mentioned.

Another widely used concept is monetary control, the main topic of this paper. Poole and Lieberman (1972), Friedman (1977), Poole (1977), Brunner (1980), Lombra (1980), Black (1982) and Pierce (1982) are some examples. They all mean with monetary control some kind of control over the money stock ("the quantity of money", "a specific monetary aggregate", "monetary growth" or "constant monetary growth"). However, these interpretations of monetary control seem identical to the interpretations of money and money stock control. This is something that puzzles me. From a semantic point of view, monetary control seems to have a broader implication than just money stock control. Does monetary control always implicate money stock control? And also vice versa? For example, monetary control could be interpreted as control over the money stock, interest rate(s), exchange rate or combinations of these variables (under certain circumstances). Another possible interpretation of monetary control could stress the power element of control: some kind of political economy approach, which emphasizes the influence of certain interest groups on the implementation of monetary policy. Some interpretations of monetary control in a power-process context will be presented below.

The final mentioned terminology in table 2.4, i.e. monetary controls, contains the already discussed instrument interpretation of monetary control.

In the following analysis, attention will be paid to different interpretations of monetary control in a power-process context. Table 2.5 provides a global picture of various power-process interpretations. For convenience, no attention will be paid to non-conventionalist or non-mainstream economic schools of thought such as Marxist or Neo-Ricardian economics²⁶.

Table 2.5 Power-process interpretations of monetary control

- 1 Government versus market based monetary control
- 2 Political economy approach of monetary control
- 3 Various directions of literature on monetary control
- 4 Interpretations of the shortened transmission process ("targets and indicators approach")
- 5 Feasibility of controlling the money stock
- 6 Rules versus discretion

For lack of space in this small paper, and because of already elaborate coverage in many publications, no attention will be paid to the last four interpretations. The various directions of the literature on monetary control have been summarised by Friedman (1975) and Lombra (1980) into two main approaches. One approach in monetary control literature concentrates on the target and indicators problem. To quote Lombra (1980): "One major branch of research proceeded by collapsing hundreds of years of monetary research into two equations: one linking the Fed's "instruments" to the monetary aggregates - the so-called "intermediate" targets - and the other linking the monetary aggregates to the vector of key macroeconomic variables comprising the "final" targets or ultimate objectives of policy". The other approach focuses on the application of (optimal) control methodologies.

The question of feasibility of controlling the money stock has been extensively discussed, for example in Poole and Lieberman (1972), Poole (1976) and Johannes and Rasche (1987).

The rules versus discretion debate (or passive versus active or nonactivist versus activist) has been the topic in articles such as Fischer (1990) and Brunner (1980).

The during the last 25 years extensively discussed targets and indicators approach is summarised in Eijffinger (1986). Eijffinger presents also a clear review of the confusing use of words in the targets and indicators literature [also excellently discussed in Friedman (1975)].

For example, one group of authors²⁷ uses the terminology of (instruments, targets, indicators, goals), while another group²⁸ uses the opposite terminology of (instruments, indicators, targets, goals).

The first interpretation to be discussed more elaborate, i.e. the government versus market control interpretation, concerns the so called monetary order²⁹. The existing monetary order can be described as a "... two-layered system, one layer consisting of the central bank or the monetary authorities and the other made up of commercial banks"³⁰, with the monetary authorities providing base money. In the existing monetary order the amount of base money is consequently under control of the monetary authorities, i.e. the government exercises monetary control. However, two opposite schools of thought stress the primacy of the market with respect to monetary control³¹. One school originates in the work of F. Hayek, the well-known godfather of the Austrian School of Economics. Hayek proposes the introduction of competing currencies, as well as the maintenance of the issue of base money by the government. According to Hayek, the government will abuse its power to provide the economy with base money, and therefore private agents should have the possibility to create their own, and/or use freely foreign currencies. As a result, "... competition between issuers will lead to the solution that best fulfils the wishes of the public"³². In this system the power of the monetary authorities to exert control over the issue of base money is shared by the market. The second school, the so called New Monetary Economics, even denies the government the right to issue base money³³. The proponents of this school propose a monetary order without a central bank. In the monetary order of the New Monetary Economics monetary control is completely exercised by the market.

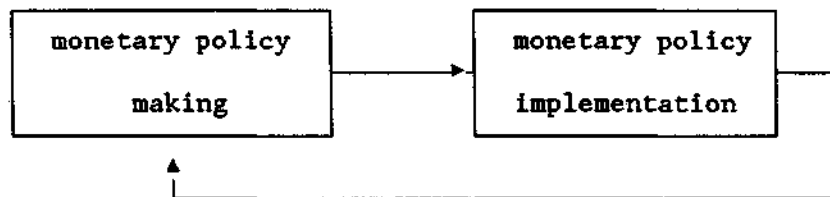
The political economy approach is an interesting instrument for analysing the power and process elements of monetary control. Especially the question which persons, organisations (-groups of persons) or instruments exercise control over the determination of the ultimate goals, and consequently over the determination of targets, indicators and instruments of monetary policy, could be analysed in a political

economy framework. The question which in my opinion is the most essential one regarding the problem of monetary control. Therefore, the power elements in the policy making and policy implementation processes should be included in studies of monetary control. Studies which formulate monetary control only in terms of control over the money stock neglect these important aspects.

The political economy approach is embedded in the so called public choice theory, which according to Frey (1984) "... seeks to analyse political processes, and the interaction between the economy and the polity, by using the tools of modern (neoclassical) analysis".³⁴

In the following analysis, a simple descriptive model of monetary control in a power-process interpretation is presented. Figure 2.1 gives an overview.

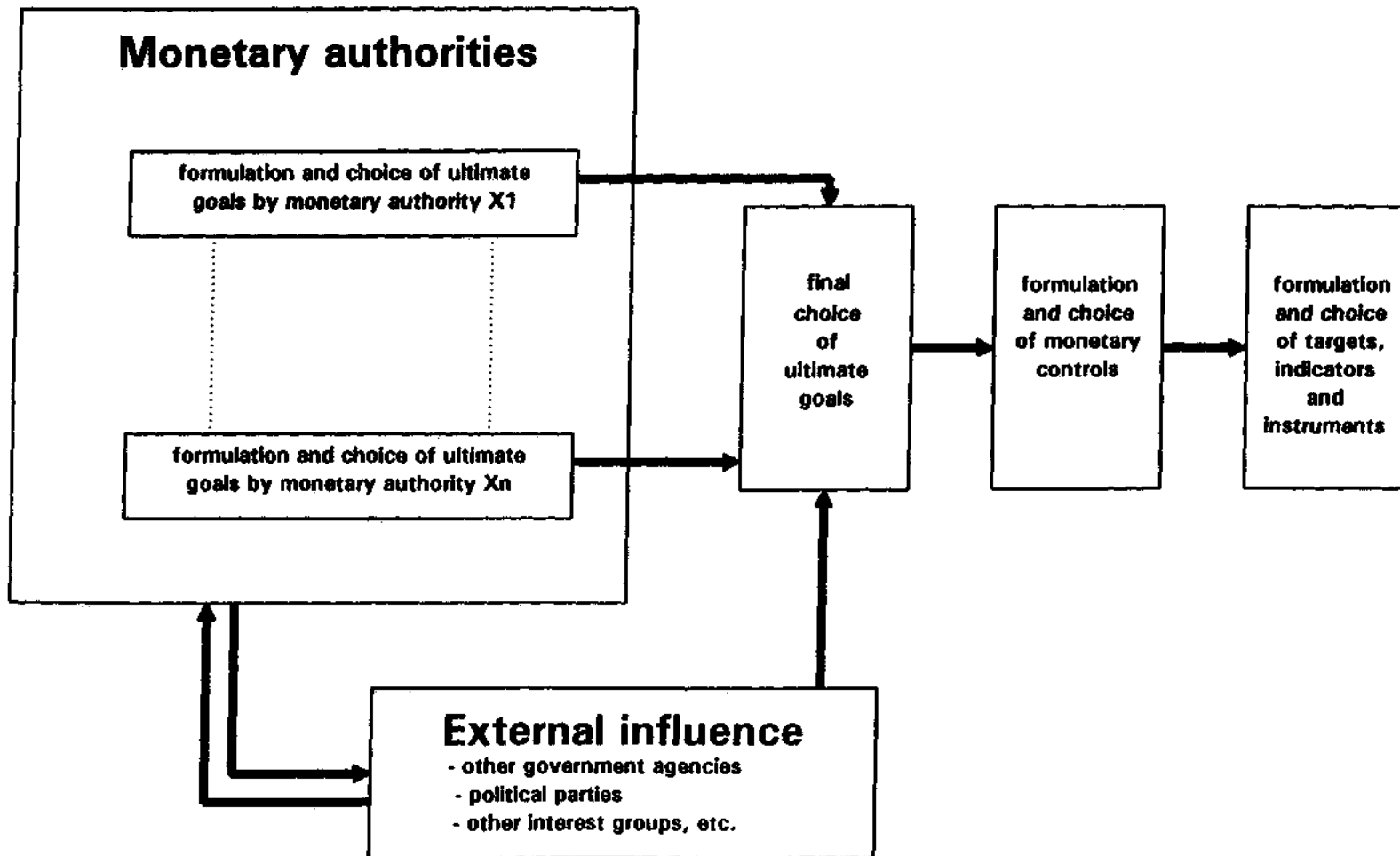
Figure 2.1 Monetary Control in a Power-Process Perspective



Monetary control in a power-process perspective can be divided in two interrelated sub-processes. Monetary policymaking includes the formulation and choice of the ultimate policy goals by the monetary authorities, the final choice of policy goals, the formulation and choice of monetary controls and the formulation and choice of various targets, indicators and instruments of monetary policy. Figure 2.2 provides an overview (see next page).

Various monetary authorities formulate and choose ultimate goals. This formulation and choice is influenced to some extent by outside factors. Finally, during some kind of power struggle the ultimate goals

Figure 2.2 Monetary policymaking



are chosen. Then, the monetary controls are formulated and chosen. In this stage the monetary authorities decide (explicitly or implicitly) whether they will use informal or formal controls with direct or indirect effects. When these controls are selected the targets, indicators and instruments to be used for the implementation of monetary policy are respectively formulated and chosen. The implementation of monetary policy is presented in figure 2.3.

Figure 2.3 The Implementation of Monetary Policy

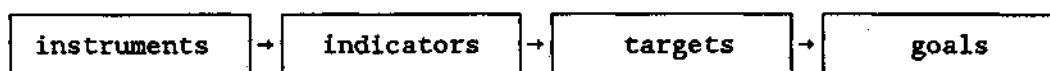


Figure 2.3 is based on the well known targets and indicators approach. Figures 2.1, 2.2 and 2.3 are relatively simple and certainly not complete and perfect, but offer some orientation for a political economy approach of monetary control.

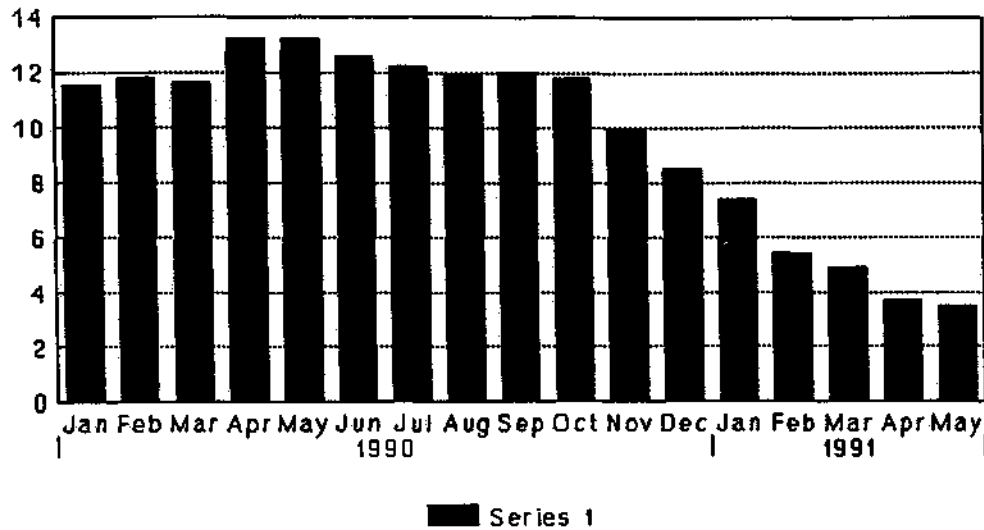
3.0 Implications for Japan

The presented analysis of interpretations of monetary control can be used in a Japanese context. According to my opinion especially the political economy approach of monetary control offers some interesting possibilities.

In an earlier stage of my research, I concentrated on the topic of monetary control in a globalised financial world. As part of this orientation I started to think about what exactly monetary control is, resulting in the above made distinction between the instrument and power-process interpretations of monetary control. This classification resulted also from my growing believe that monetary control in Japan shouldn't be interpreted as strict control of only the money stock (in a monetarist fashion). The following reasons support this believe.

First, during 1990 the increase of the broad monetary aggregate M_2 + CDs in a specific month from the same month a year earlier fluctuated between a minimum of 8.5% in December and a maximum of 13.2% in April and May. However, in 1991 growth of M_2 + CDs decreased to 3.5% in May (see table 2.6 next page). These differences in money growth figures are quite remarkable. To me, it looks like the Bank of Japan implemented for some reason a relative loose monetary policy during the major part of 1990 and changed during the last quarter to a restrictive policy. Based on money growth figures of the last year and a half, the Bank of Japan doesn't seem to attach much importance to money growth stability. Of course, the possibility exists that the Bank of Japan in fact wanted to attain a stable growth of the money stock but failed to achieve it because of some difficulties experienced in implementing monetary policy with respect to this goal. However, this possibility seems unlikely. If monetary authorities really want to control the money stock around a certain growth path, they have the opportunity to do so. According to literature on monetary policy and monetary control, when the institutional framework and the operating procedures have the proper form, monetary authorities are quite able to control the money stock [the "feasibility of monetary control" question; see for example Johannes and Rasche (1987), Poole

Table 2.6 Rate of change M2+CDs



Comparison with same month one year ago

Source: Economic Statistics Monthly, Japan Economic Journal

and Lieberman (1972), Poole (1976) and Poole (1991a)]. So probably the Bank of Japan had some other priorities with respect to the money stock.

Second, staff members have frequently declared that the Bank of Japan doesn't pursue a strict monetarist interpretation of monetary policy implementation. For example Mr. Y. Suzuki (former director of the Institute for Monetary and Economic Studies, the Bank of Japan) has explicitly mentioned this orientation of the Bank of Japan: "..., the policy attitude of the Bank of Japan over the past ten years, ..., is in my interpretation neither that of post-Keynesian "discretionary fine tuning" nor that of a "x% rule". It is discretionary in that it follows for gradual tuning of monetary growth, and it conforms to a rule in the sense that it stabilizes monetary growth as much as possible and gives information to the public about policy in the form of forecast announcements. An appropriate term may be "eclectic

gradualism".³⁵ Mr. R. Shimamoto, (former?) executive director of the Bank of Japan, also has stressed the pragmatic orientation with respect to the money stock of the Japanese central bank: "... , even though the Bank of Japan emphasizes the money supply, we are not blind to other indicators. We consider money supply movements in an overall framework that includes prices, output, the balance of payments, interest rates at home and abroad, movements in the foreign exchange market, and attitudes of financial intermediaries to lending.

... Thus, the attitude of the Bank of Japan toward the money supply is, in a word, pragmatic. Given uncertainty, shifts in functions, and instabilities, we believe this stance most appropriate to conditions at home and abroad."³⁶ These opinions have been supported by Mr. M. Okabe (former director of Division I, Institute for Monetary and Economic Studies): "... the formula now employed in Japan is more aptly called a money-focused monetary policy rather than a monetary-targeting policy. It could be described as eclectic gradualism. ... , the Bank of Japan has, in fact, managed its monetary policy in a pragmatic fashion, keeping careful watch on such other indicators as prices, production, balance of payments, currency rates and bank loans."³⁷ And also in a different form by Mr. T. Tamura, director of the Credit and Market Management Department of the Bank of Japan: "The Bank of Japan began publishing its forecast of M2+CDs in 1978, although we have taken a rather cautious approach compared to some other countries in the sense that it was given the status of a "projection" and not a "target".³⁸

According to these statements of staff or former staff members of the Bank of Japan monetary policy in Japan shouldn't be interpreted as a (strict) monetarist policy.

Of course, given the economic success story of Japan some monetarist economists claim the opposite. For example, according to M. Friedman "... Japan illustrates a policy that is less monetarist in rhetoric than the policies followed by the United States and Great Britain but far more monetarist in practice."³⁹

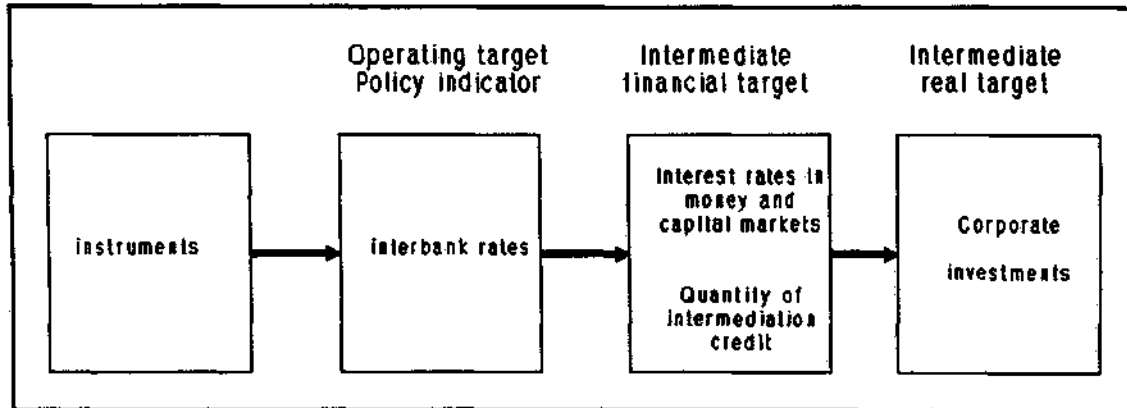
However, the facts remain that the Bank of Japan firstly uses inter-bank interest rates as indicators and not the by monetarist economists prescribed monetary base and secondly doesn't adhere to a strict

target strategy with respect to the money stock⁴⁰. Against the background of these conclusions, in combination with the statements of (former) staff members of the Bank of Japan and other observers⁴¹, the monetarist claim of a monetarist focused monetary policy in Japan doesn't seem to be very credible (it has also to be mentioned that the supporters of the monetarist claim don't present convincing theoretical and/or empirical evidence with respect to their claim). Further evidence for the absence of strict monetary targeting in Japanese monetary policy is presented in note 41.

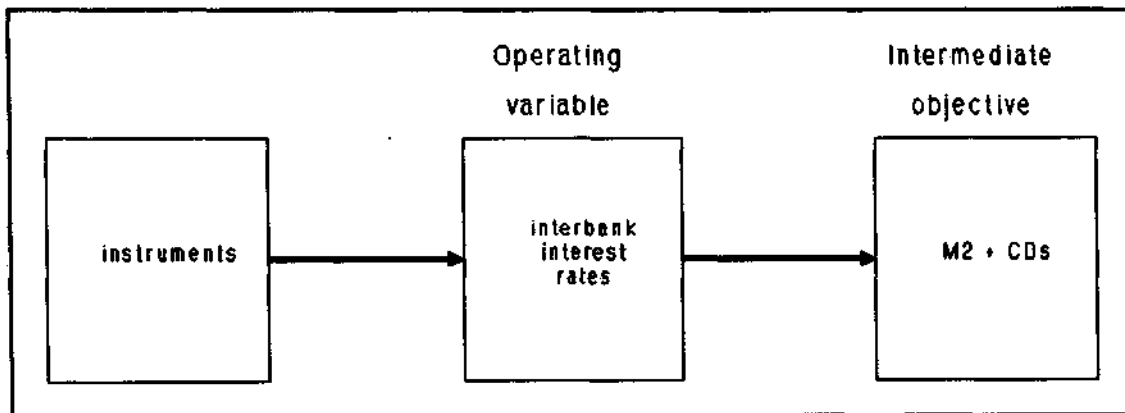
Third, the pragmatic interpretation by the Bank of Japan of the so called money focused monetary policy is reflected in the use of several variables as (intermediate) targets. This point is stressed by several authors. For example, Hamada and Hayashi (1985) mention on page 99: "... monetary policy in Japan has been successful because the perspective of the Bank is multi-scoped rather than single-scoped on a single monetary aggregate." This statement has been supported by Suzuki (1986), p.73-74: "Thus, M2 + CDs has a higher degree of exogeneity than the nominal and real interest rates, and is therefore the most appropriate indicator to use as the intermediate target. However, intermediate financial variables, such as bank credit, interest rates, and the exchange rate, retain some importance. An eclectic attitude toward policy implementation, paying full attention to intermediate financial variables in addition to money, is necessary because many factors including unpredictable expectations can disrupt the transmission channels."

In the following analysis, the views of several authors with respect to the possible use of several (intermediate) targets by the Bank of Japan will be presented. The figures show the interpretations of these authors with respect to the use of (intermediate) targets/objectives by the BoJ. In the figures the respective terminologies of these authors will be used. The reader should regard these figures as just some helpful illustrations of different opinions.

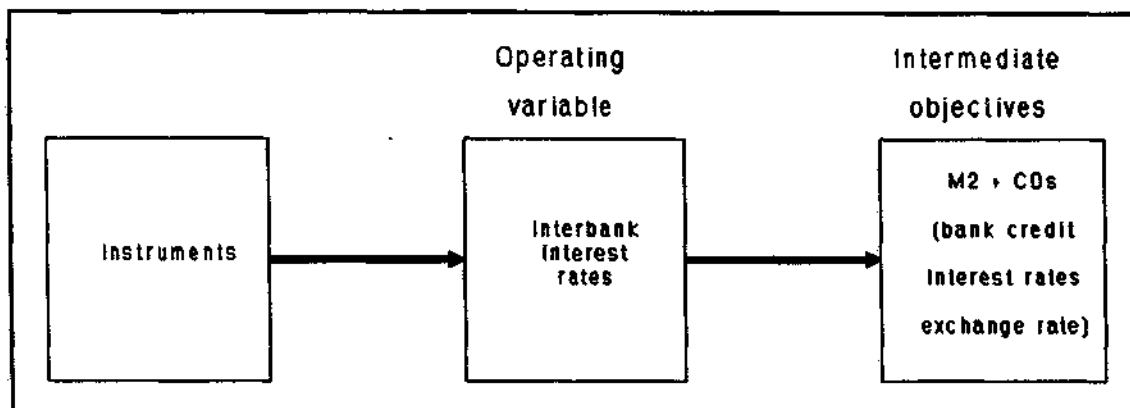
Cargill and Hutchison (1988)



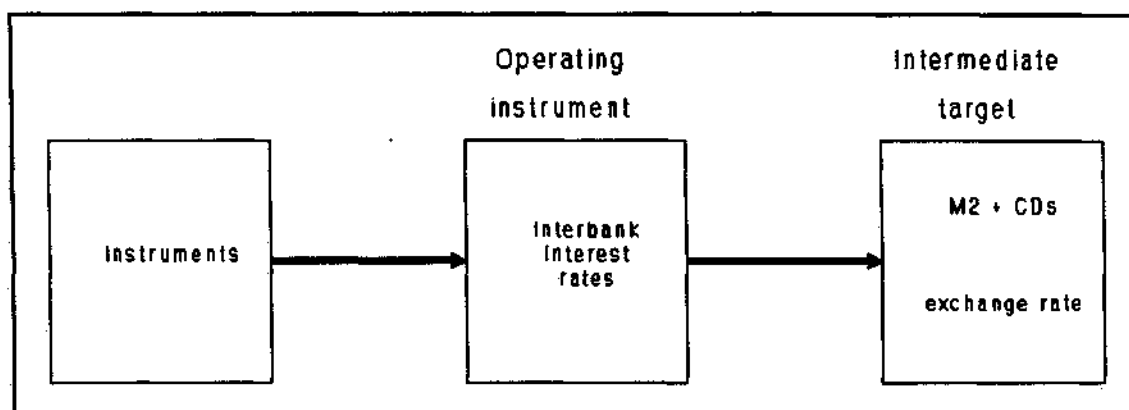
Suzuki (1985)/(1987a), Miyake (1989), Kuroda (1989), Suzuki, Kuroda and Shirakawa (1988)



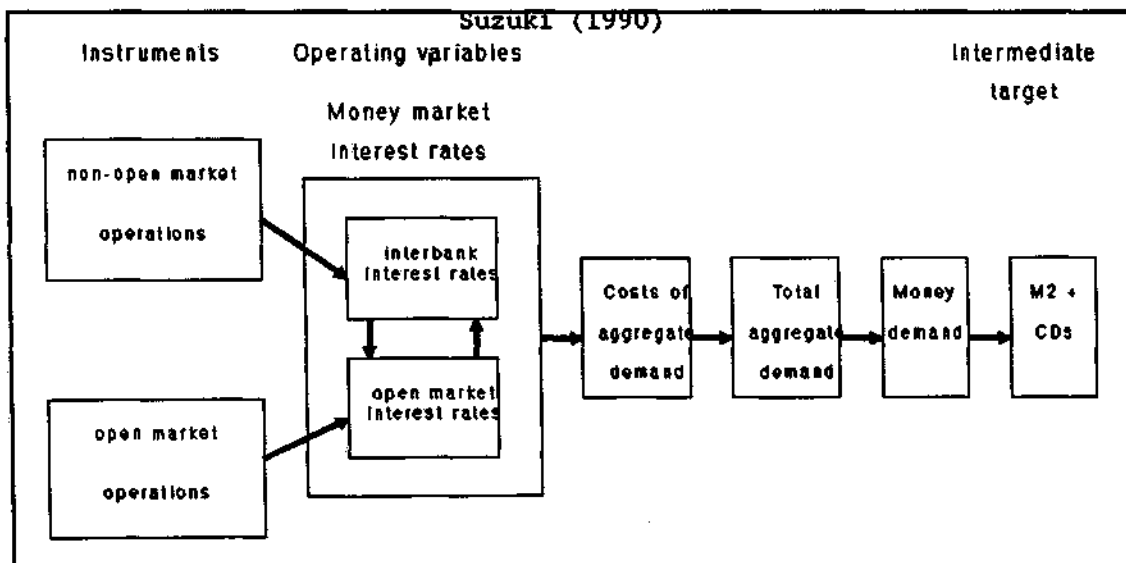
Suzuki (1986)/(1987c)



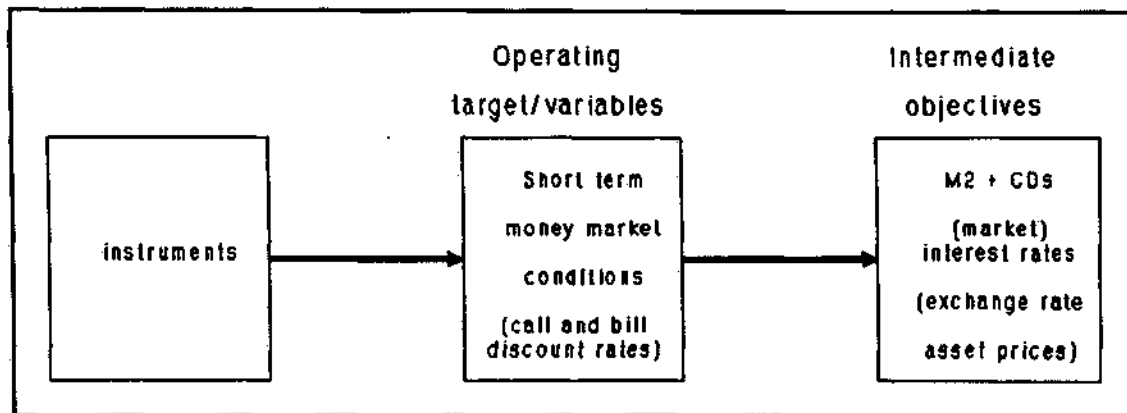
Hutchison (1986b)/(1988)



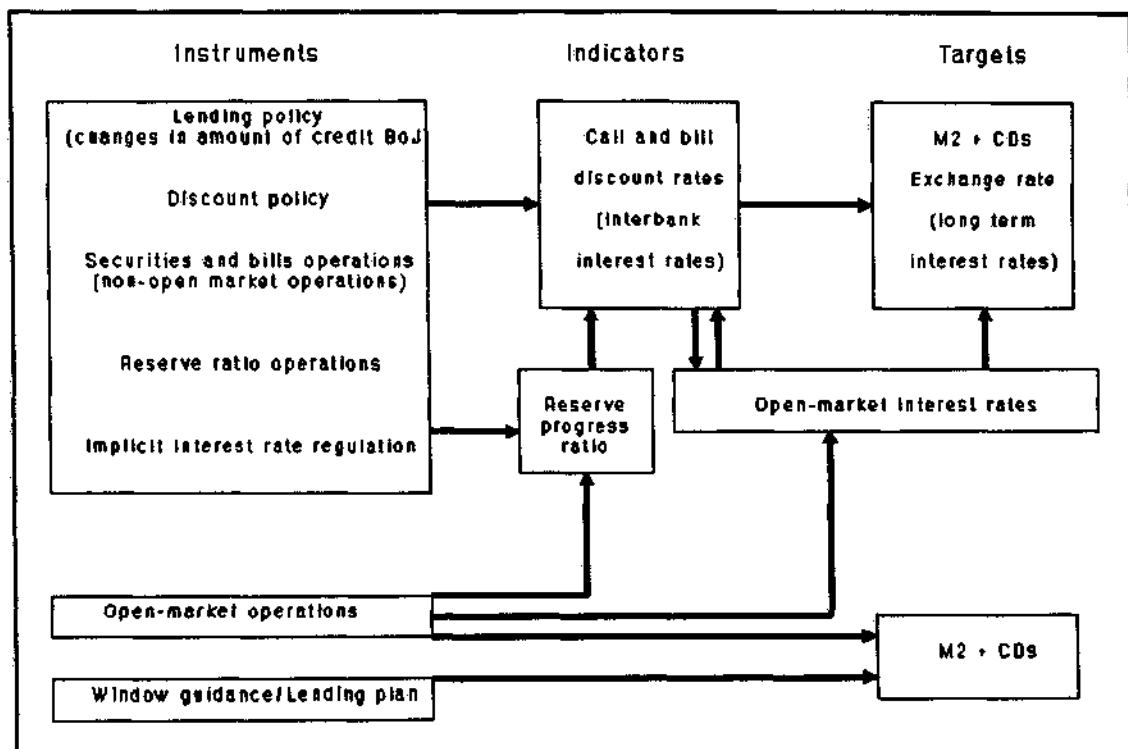
Suzuki (1990)

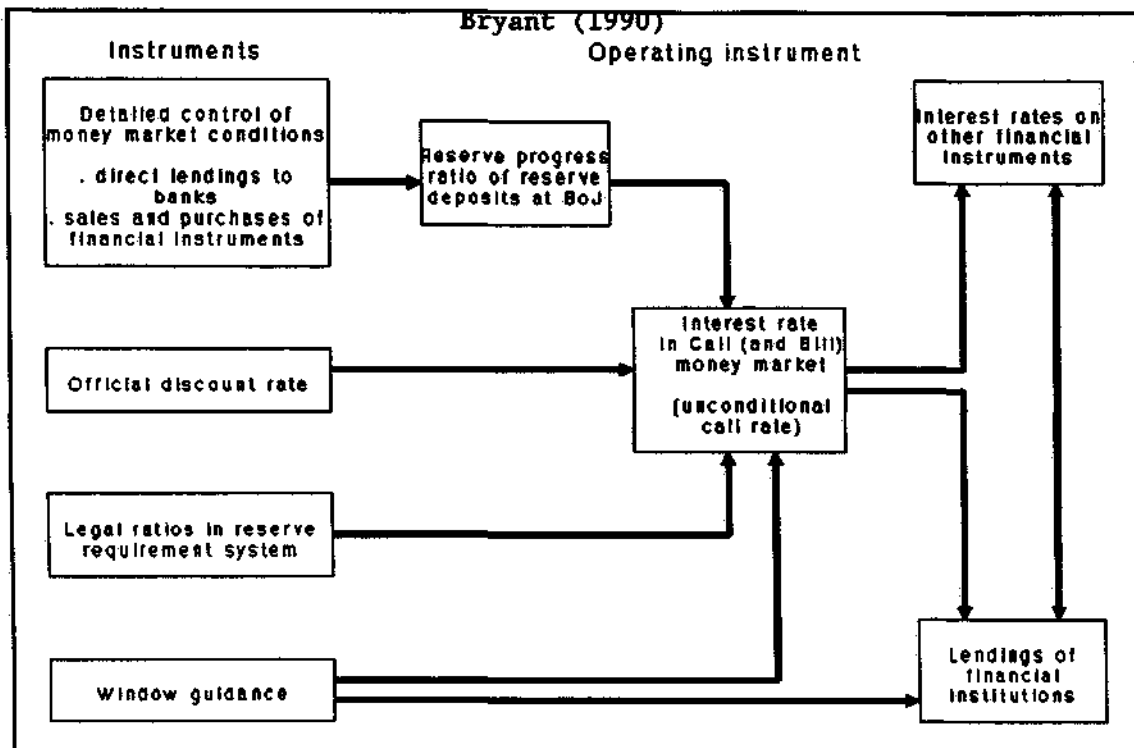


Nakao and Horii (1991) and Tamura (1991)

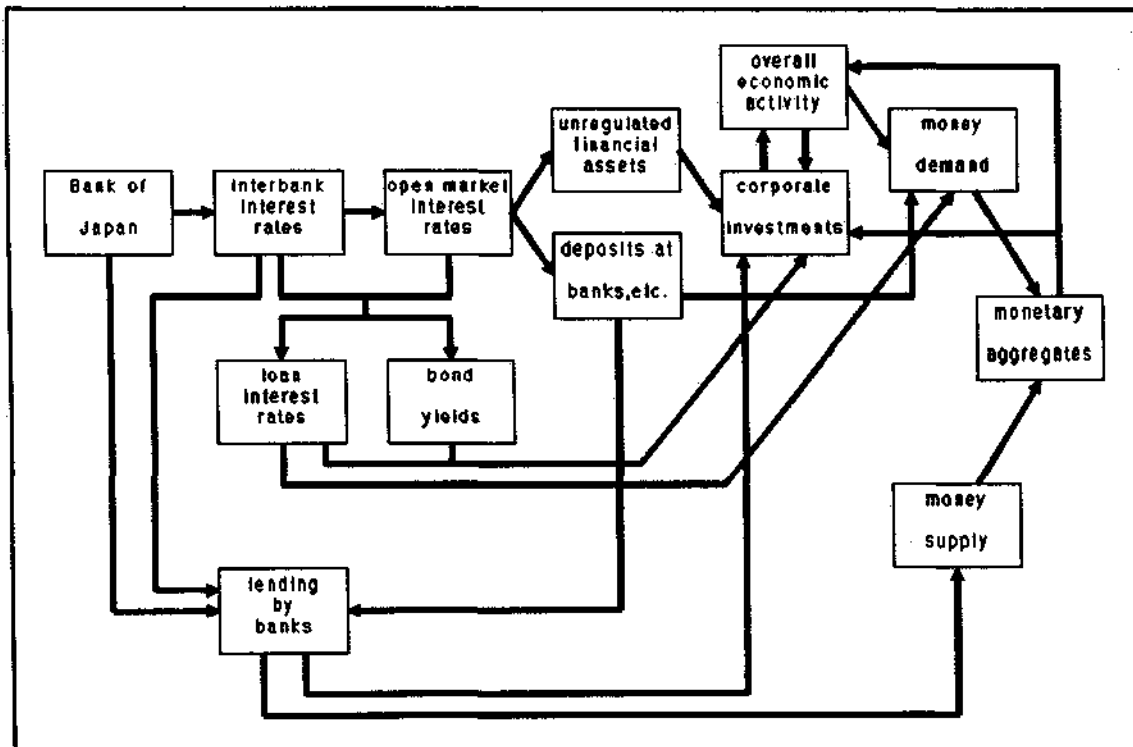


Van Rixtel (1990)

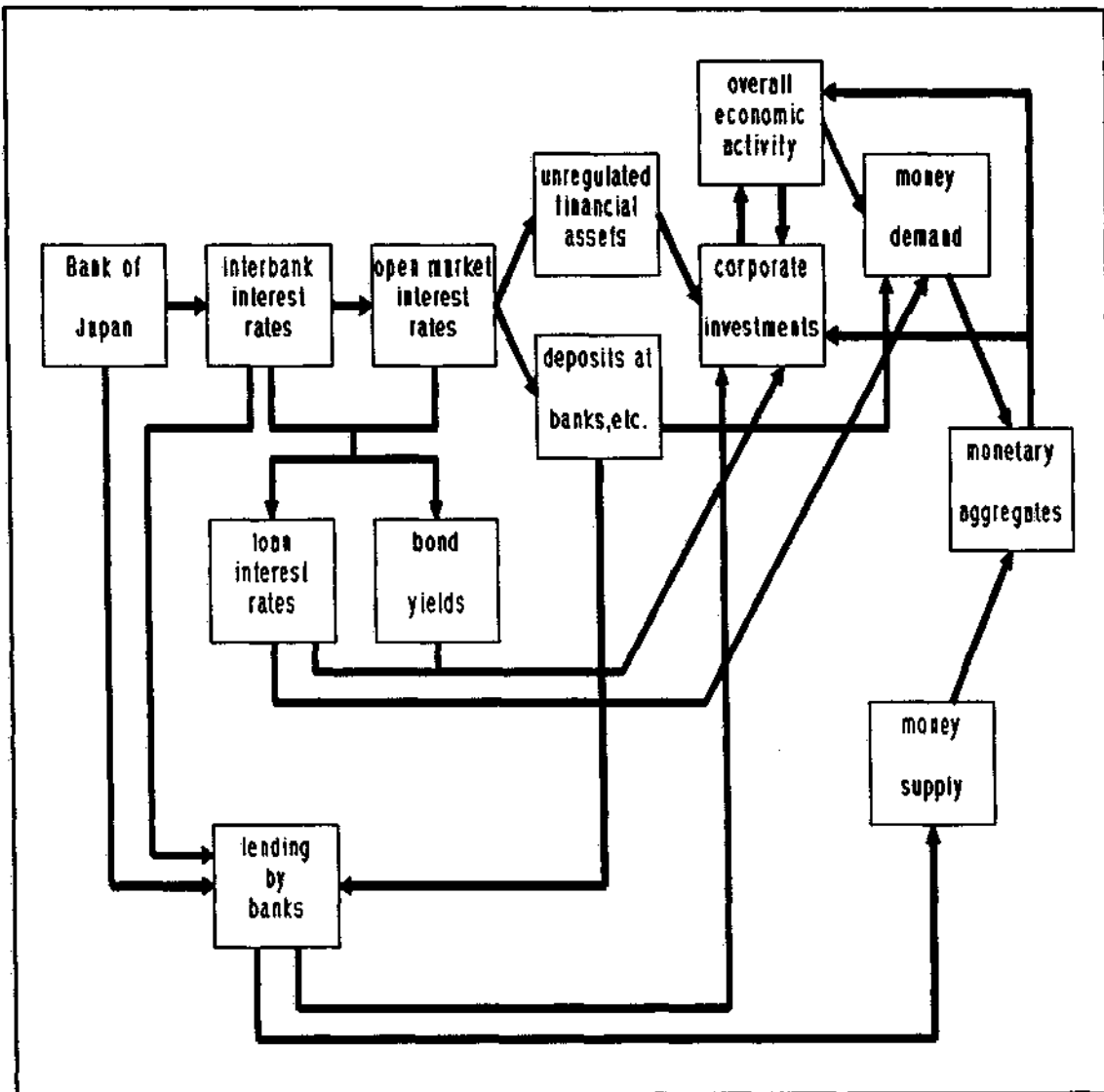




Okabe (1990)



Bank of Japan (1985)



From these figures, the following conclusions can be drawn:

- First, the monetary aggregate M2 + CDs is most often mentioned as (intermediate) target. The strongest supportive statements of this view can be found in the publications of Y. Suzuki, the former director of the Institute for Monetary and Economic Studies of the Bank of Japan, and other members of this Institute. See for example Suzuki (1985) and Suzuki (19887a), Suzuki, Kuroda and Shirakawa (1988), Miyake (1989), Kuroda (1989) and Okabe (1990). It has to be mentioned

that some observers are rather sceptical about the use of the money stock as an intermediate target by the Bank of Japan. See for example Bryant (1990).

- Second, some authors also emphasize the use of the exchange rate as an intermediate target by the Bank of Japan. Hutchison is the most outspoken author with respect to this view. See for example Hutchison (1986b) and (1988).

- Third, as a result of the recent orientation of the Bank of Japan on the interest-rate-expenditure channel regarding the implementation of monetary policy⁴², some authors stress the importance of interest rates and/or private expenditures as (intermediate) targets. For example, see Cargill (1985) and Cargill and Hutchison (1988).

- Fourth, in recent publications some staffmembers of the Bank of Japan have mentioned the increased reservations the Bank of Japan applies to its interpretations of the money stock and its enhanced attention with respect to market interest rates. See Nakao and Horii (1991) and Tamura (1991) (see also Batten, Blackwell, Kim, Nocero and Ozeki (1989)).

It will be clear from the above presented analysis that with respect to the intermediate targets used by the Bank of Japan no clear agreement exists amongst some of the most famous observers of Japanese monetary policy (I certainly don't want to include myself in this group of observers). As a result, the obvious question arises which variable(s) are actually being used by the Bank of Japan as target? In other words, which economic variables are controlled by the Bank of Japan? How should one interpret monetary control in Japan? According to my opinion, 2 approaches offer the best opportunities to answer these questions.

First, an interpretation from an political economy perspective may generate some interesting answers. As we have seen, monetary control in Japan shouldn't be interpreted as strict control of only the money stock. The Bank of Japan seems to have a multi-scope orientation towards the use of targets. What interests me is why the Bank of Japan pursues this orientation. Is it because the Bank of Japan believes this approach offers the best results with respect to the implementa-

tion of its policy? Or is it because some other actors/institutions to some extent "force" the Japanese central bank to control certain economic variables? This last question was the major reason for me to distinguish between the instrument and power-process interpretations of monetary control. Maybe an approach in accordance with figure 2.2 can reach to a solution.

Second, the question which economic variables are being controlled by the Bank of Japan can be answered by using certain, so called optimal control techniques. These techniques are rather complicated and require the specification of a macroeconomic model. However, recent research has generated some very interesting results⁴³.

For me, the challenge is to integrate these 2 approaches and to provide some more conclusive results with respect to the specific nature of monetary control in Japan. Only then one can draw some funded conclusions about monetary control in Japan in the context of a globalised financial world.

Notes:

- (1): For an interesting analysis see Klammer (1985), especially chapter 13.
- (2): Lombra (1980), p.270.
- (3): For example see B. Friedman (1975) and Lombra (1980).
- (4): The Oxford Guide to the English language, edition Book Club Associates by arrangement with Oxford University Press. London: Guild Publishing, 1984.
- (5): Tinbergen (1952), p.7. Italics not in original.
- (6): Tinbergen (1952), p.70. Italics not in original.
- (7): More specific, Tinbergen discerns between data, targets, instruments and irrelevant variables. See Tinbergen (1952), p.6-7.
- (8): Tinbergen (1952), p.53. In the following analysis, a process interpretation regarding economic policy will be used.
- (9): This analysis differs in some extent from the traditional terminology in Dutch literature regarding the supervision of the Nederlandsche Bank (the Netherlands central bank). Structural policy in this paper has a much broader meaning than the concept of "structuurbeleid" of the Nederlandsche Bank in Dutch literature. The main reason for this is to include the possibility of explicit ministry of finance policies. Prudential policy is equivalent to "bedrijfseconomisch toezicht" of the Nederlandsche Bank in Dutch (business or micro economic supervision). See Wessels (1987), p.94-107. Monetary policy strictly defined contains also possible monetary policy actions of the ministry of finance and consequently is not equivalent to "algemeen-economisch toezicht" (general or macro economic supervision) of the Netherlands central bank. For example, in some countries foreign exchange market operations and even some domestic open market operations are conducted by the ministry of finance.
- (10): Translation of Wytzes (1978). p.1.
- (11): Wessels (1987), p.97. In the Cross Report (BIS (1986)) the terminology of prudential policy is also used. The report distinguishes explicitly between so called macro-prudential policy, i.e. the policy regarding the "... safety and soundness of the broad financial system and payments mechanism" (BIS (1986), p.2), and monetary policy. Consequently, the report seems to regard monetary policy in the sense

of strict monetary policy formulated in this study.

(12): Liquidity or reserve requirements have also a monetary policy (in strict sense) character. In this study reserve requirements will be explicitly included in the analysis of monetary control.

(13): The monetary authorities include in general the ministry of finance and the central bank. Sometimes some other governmental institutions have to be taken into account as well. For example in Japan the Ministry of International Trade and Industry (MITI) and the Ministry of Posts and Telecommunications exert some influence in monetary and supervisory policy. Burger (1971) uses the terminology of monetary policymakers, i.e. those individuals who, acting alone or in groups, have the power to manipulate the monetary policy instruments.

(14): Horvitz (1979), p.348. For example, open market operations in Horvitz's terminology are called general controls. Federal Reserve control over stock market margin requirements are an example of selective controls.

(15): Other possible classifications:

- Regulatory monetary controls:
 - * formal regulatory controls
 - * informal regulatory controls
- Non-regulatory monetary controls:
 - * market based controls
 - * non-market based controls

or:

- Direct monetary controls:
 - * formal regulatory controls
 - * informal regulatory controls
- Indirect monetary controls:
 - * market based controls
 - * non-market based controls

(16): In the terminology of target oriented approaches of control quite often the concept regulation is used instead of control. For example, Teranishi (1986) discusses the regulation of the Japanese financial system in terms of regulation of interest rates, regulation of entry into the markets and regulation of international capital movements. An elaborate analysis is presented in Teranishi (1990). For

further literature regarding target oriented approaches of control (or, in more common terminology, regulation) regarding the Japanese financial system see for example van Rixtel (1988), Suzuki (1987a), Suzuki (1987b) and Suzuki (1989). It has to be mentioned that the used terminology of target oriented controls has nothing to do with the word target in the analysis of monetary policy in terms of instruments, indicators, targets and goals.

(17): Pierce (1982), p.775. Pierce divides regulations into three categories. To quote: "The first category involves required reserve ratios and the definitions of the liabilities against which reserve requirements are imposed. The second category involves regulations with respect to interest rates and other relevant prices. The third category of regulations involves accounting procedures such as lagged reserve accounting". (Pierce (1982), p.776.)

(18): Personal interview.

(19): Poole (1990), p.266.

(20): Friedman (1975). p.450.

(21): Friedman defines the instrument problem as "... the choice of the variable(s) over which the central bank will exert direct control" (Friedman (1975), p.448). The intermediate target problem "... is the choice of a variable, usually a readily observable financial market price or quantity, which the central bank will treat, for purposes of a short-run operating guide, as if it were the true ultimate target of monetary policy" (Friedman (1975), p.456). For an elaborate discussion of the instrument and intermediate target problems see Friedman (1990).

(22): Burger (1971), p.163.

(23): B.Friedman (1975), p.443.

(24): Black (1982), p.759.

(25): See for example Fischer (1990).

(26): See for example Plattel (1985).

(27): See for example Burger (1971), p.166-170.

(28): See for example B.Friedman (1975).

(29): This analysis draws heavily on Visser (1989).

(30): Visser (1989), p.1.

(31): Visser (1989), p.1-4.

- (32): Visser (1989), p.3.
- (33): Visser (1989), p.3-4.
- (34): Frey (1984), p.5.
- (35): Suzuki (1985), p.9.
- (36): Shimamoto (1982), p.82.
- (37): Okabe (1990), p.16, p.18.
- (38): Tamura (1991), p.8.
- (39): M. Friedman (1985), p.27.
- (40): In this paper, monetray targeting is defined as a certain (x%) rule for money growth. Some authors stick to a different interpretation of monetary targeting. See for example Fischer (1988), p.150:
 "Monetary targeting serves the valuable purpose of forcing the central bank to announce its intentions for the next year, and of explaining why it failed to meet them this year. Provided the targets are taken seriously, targeting lends a coherence to monetary policy that operating by the "touch and feel" of the market does not. ... The adoption of monetary targeting does not necessarily imply inactive policies. None of the four countries, including Japan, has tried to keep money growth constant, and all have responded to the business cycle, to velocity shocks, and to the exchange rate".
- (41): Okabe (1990), p.17-18, presents a summary: " Other analyses, however, doubt that the Bank of Japan has really emphasized money supply trends in managing its monetary policy. They argue that (1) no statistical analyses support the observation that, whenever disparities occurred between money projections and actual values, the central bank responded by guiding the actual values closer to the projections through interest rate management; and (2) no empirical analyses bear out the contention that the Bank of Japan has intentionally held down the growth trend in the money supply." One of the most outspoken supporters of this view is M. Hutchison. See for example Hutchison (1982): "..., the Bank of Japan also has not achieved the decline in money growth by following monetary control procedures typically prescribed by monetarists." And also Hutchison (1986a), p.43-44: "... the move away from direct credit controls toward more flexible short-term interest rates does not represent a "money focused" monetary policy in the sense of a close adherence to a constant monetary growth

rule. In particular, money variability has not declined in recent years in contrast to interest rate variability. ... the Bank of Japan has not systematically moved interbank interest rates in response to deviations of money growth from its narrow targeted range since either the move to floating exchange rates in 1973 or the announcement of money projections starting in 1978. ... The evidence suggests that a more flexible approach to policy is followed, and that Japan's success at maintaining low and stable inflation and stable output growth cannot be attributed to its adoption of traditional monetarist policy prescriptions." Further support of the non-monetarist orientation of monetary policy in Japan is presented in Cargill and Royama (1988), p.175: "Has the BOJ adopted a monetarist strategy, or has it achieved what appear to be monetarist results via an operating strategy that is clearly nonmonetarist - that is, an operating strategy based on the interbank market interest rate? ... First, the operating tactics of the BOJ have not changed significantly; that is, the BOJ clearly operates with an interest-rate-focused rather than a money-supply-focused procedure similar to the one used before the initiation of reform. Second, there has been a subtle and gradual shift toward policy instruments - open-market operations in particular - that exploit the interest-rate-expenditure channel and the enhanced role that flexible interests have been given by financial reform. Third, there has been a major shift in the strategy of BOJ policy associated with the departure from the fixed exchange-rate standard after 1973 and the adverse effects of the inflation of 1973 and 1974. The BOJ clearly has a price stability objective."

A summary is presented in Cargill and Hutchison (1988). Dotsey (1986) also denies the use of traditional monetarist procedures by the Bank of Japan: "..., Japan achieves results that are monetarist in nature without using the procedures frequently advocated by monetarists." See also Bryant (1990), p.33/34: "Despite some foreign monetarists' praises of the Bank of Japan for following monetarist policies, it seems incorrect to me to label the substance of Japanese monetary policy as monetarist. ... Within the Bank of Japan itself, there are interesting differences of nuance about what the "money-focused monetary policy" has been and should be. But I have been unable to find, even among

those members of the Bank of Japan staff most supportive of an increased emphasis on money, an advocacy of using the money stock as an intermediate target in an explicit two-stage, intermediate-target strategy. ... Yoshio Suzuki can fairly be described as one of those within the Bank of Japan most sympathetic to the increased emphasis on money. ... Other influential members of the Bank of Japan staff, however, have not been fully comfortable with Suzuki's descriptions." See also Ito (1989).

Cargill and Hutchison (1988), p.241, characterize the policy of the Bank of Japan as eclectic monetarism: "... While the evidence suggests that the Bank of Japan does not target monetary growth according to monetarism, the effect of its policies has been to achieve a well-defined long-run monetary growth path. Given the close long-run relationship between inflation and money and the undeniable importance of price stability in Japan, the Bank of Japan has de facto achieved a monetarist outcome. Perhaps it would be better to characterize the policy as a form of eclectic monetarism in which the Bank of Japan does not adhere to specific monetary growth targets and controls the money supply via a policy focused on interest rates. However, the commitment to stable and low inflation is necessarily reflected by a long-run stable monetary growth rate."

Regarding the question of monetary growth targeting former Governor of the Bank of Japan Mr. Haruo Mayekawa made an interesting statement in the fourth issue of *Kredit und Kapital* in 1979: "..., starting in July 1978, the Bank of Japan made it a practice to publish, in the first month of each quarter, the projected growth of M2 during the current quarter. It is hoped that the public announcement of such projections will help deepen the general public's understanding on the important problem of the money supply, and thereby will permit the authorities to resort more flexibly to monetary restraint, when needed. The bank has not yet started to set a specific numerical target for monetary growth, partly because empirical studies so far carried out have not found a demand for money function stable enough to justify normative monetary targetry, and partly also because experience with the control over the money supply has not yet demonstrated the sufficiently high degree of precision required for the adoption of such a strategy."

Obviously, the Bank of Japan was thinking at the end of the seventies whether to set specific monetary growth targets or not, but at that moment decided not to do so. Given the arguments presented in the analysis it seems defensible to assume also the absence of specific monetary growth targets in the eighties. Some recent support for this statement is provided by Nakao and Hori (1991), p.12, p.16-17:

"..., The Bank of Japan has never undertaken targeting of monetary aggregates as central banks in other major countries have done, which reflects its pragmatic approach to the subject. In fact, at the outset of publication of monetary forecasts, the Bank said it would naturally pay particular attention to money supply in addition to other economic and financial indicators but that the publication of its forecast of money supply was rather intended to help deepen public understanding of money supply. ... monetary policy cannot be decided on the basis of a limited number of economic and financial indicators. Monetary policy, of course, must be decided viewing a wide range of economic and financial variables as discussed earlier. This attitude may be criticized as lacking discipline, but it is the very reason that monetary policy still remains something of an art". And also by Tamura (1991), p.9, p.11: "..., the Bank of Japan has increased the number of reservations it applies to the interpretation of money supply since the mid-1980s, although emphasis on stabilizing money supply growth in the medium term has been kept. ... As such, the Bank of Japan constantly watches a wide range of economic and financial developments, and makes monetary policy decisions in a pragmatic manner." See also Batten, Blackwell, Kim, Nocera and Ozeki (1989), p.31: "It would appear that the Bank of Japan is increasingly focusing on influencing the short-term interest rates and directly influencing the general economy rather than conducting monetary policy through the strict application of monetary targeting. This new approach is expected to enhance the effectiveness of Japanese monetary policy to the extent that officially-induced changes in the shorter-term interest rates impart appropriate signals to the banking system and the rest of the economy." So, according to these authors the Bank of Japan applied some form of monetary targeting, but has focused attention more on interest rates in recent years (more specific after the money market reform of

November 1988. See Batten *cs.* (1989), p.31: "The November reform marked a turning point in the conduct of monetary policy in Japan.")

It has to be mentioned that also Tamura (1991) and Nakao and Horii (1991) stress the fact that in recent years the Bank of Japan seems to pay more attention to interest rates and has developed some doubts with respect to the money stock. See Tamura (1991), p.9: "..., the Bank of Japan has increased the number of reservations it applies to the interpretation of money supply since the mid-1980s, although emphasis on stabilizing money supply growth in the medium term has been kept. ... The Bank of Japan has increased its attention to market interest rates in view of the deepening financial markets, in which interest rates fluctuate freely and interaction between market interest rates and economic activity became greater." And also Nakao and Horii (1991), p.16: "Firstly, the Bank has increased the number of reservations it applies to its interpretations of money supply, bank credit, and other volume indicators of finance. Secondly, it has enhanced attention given to market interest rate developments. (Thirdly, as far as exchange rates are concerned, the Bank has, on balance, placed more importance on them, albeit to a varying degree, depending on specific economic conditions)."

(42): Cargill (1985), p.144. See also the vast amount of publications by Y. Suzuki.

(43): See Swank (1990).

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